

EPA New England NON-NPL Fact Sheet

Site Type: Site Awaiting NPL Decision (SAND)
Status: Previous Production

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**PINE SWAMP (OLIN
CORPORATION)**
HAMDEN, Connecticut
NEW HAVEN County

Map of Site:

Street Address: 475 PUTNAM
AVENUE

Zip Code: 06514
Congressional 03

District(s):
EPA ID #: CTD98052108
2

Site ID #: 0100224
Site Alias:

Description

The Pine Swamp property is located at 475 Putnam Avenue in Hamden, New Haven County, Connecticut. The 103.6-acre property includes a wooden shed, several paved and unpaved roads, wooded hills, five interconnected ponds, and associated wetland areas. Local tax assessor information is unknown. The property is bordered to the north by Lake Whitney, several residences, and several commercial and industrial businesses; to the south and east by additional commercial and industrial businesses; and to the west by a shopping center.

The property, originally comprising approximately 200 acres, was purchased in 1890 by Winchester Repeating Arms Company (owned by Olin Corporation) and was used to store gunpowder for approximately 60 years. Shotgun, small caliber rifle, machine gun, artillery shells, and mortar rounds were tested at firing ranges on the property. The property was also used during the 1950s and 1960s for the disposal and incineration of materials including wood, demolition debris, miscellaneous metals and glass, trash, waste gunpowder and solvent chemicals, off-specification dry cell batteries, concrete test pads, incinerator ash, and trap sands from firing ranges (i.e., spent bullets, fragments, abraded lead). Other potentially hazardous substances that have been disposed of, used, or stored on the property include polychlorinated biphenyls (PCBs), overpack drums, and empty shotgun casings. In 1964, approximately 100 acres of the original property was sold; and in 1987, 0.75 acres was purchased from the Anixter AED Company, forming the current 103.6-acre property. Disposal activities at the property ceased in 1966, following a private citizen complaint to the Hamden Health Department. Ammunition production and storage of gunpowder on the property ended in the late 1960s. In 1981, Environmental Research and Technology, Inc. (ERT) performed an environmental investigation of the property; and in 1982, ERT conducted Phase II of the site investigation. In 1986, Olin Corporation entered into a consent order with the Connecticut Department of Environmental Protection (CTDEP) to identify and remediate contaminated areas on the property. As a result of a 1988 Remedial Investigation Study conducted by Malcolm Pirnie, Inc. (MPI), six areas were identified for further study and remediation: the East Burning Grounds, the West Burning Grounds, the Battery Waste Area, the Anixter Area, the Southeast Kettle Area, and the Incinerator Ash Area. Analytical results of soil samples collected in these areas indicated the presence of volatile organic compounds (VOCs), including chlorinated solvents such as trichloroethylene (TCE) and tetrachloroethylene (PCE); semivolatile organic compounds (SVOCs); PCBs; and metals, including lead, manganese, and zinc. Other on-site disposal areas included the Shotgun Proofing Area and

the Trap Sands. MPI conducted an Interim Corrective Measure program in 1990, removing contaminated soil and/or debris from the West Burning Grounds, the Southeast Kettle, the Shotgun Proofing Area, and from discrete trap sand piles. In 1991, MPI began an annual on-site groundwater monitoring program. Additional soil sampling was performed in 1992 by ABB Environmental Services at the Anixter Area. In 1994, VAPEX Environmental Technologies installed a soil vapor extraction system at the Anixter Area. Previous U.S. Environmental Protection Agency (EPA) investigations at the property include a Preliminary Assessment (PA) completed in 1983, a Site Inspection (SI) completed in 1985, and a Site Inspection Prioritization (SIP) completed in 1995.

Depth to groundwater is 0 to 35 feet below ground surface, and groundwater flows radially inward, toward the on-site pond system. An estimated 3,309 people are served by private drinking water supply wells located within 4-radial miles of the property. No public drinking water supply wells are located within 4-radial miles of the property. The nearest private drinking water supply well is located approximately 0.2 miles south and upgradient of the property. Analytical results of groundwater samples collected from on-site monitoring wells from 1991 through 1994 indicated the presence of chlorinated solvents, benzene, toluene, ethylbenzene, total xylenes, chloroform, barium, carbon disulfide, and PCBs. No nearby private drinking water supply wells have been sampled to date; however, based on the direction of groundwater flow, no impacts to nearby groundwater drinking water supply sources are known or suspected.

Stormwater runoff from the property flows radially inward to the on-site ponds; water from the on-site ponds then flows to the north, to Lake Whitney. Other surface water bodies located along the 15-mile downstream surface water pathway include Mill River, New Haven Harbor, and Long Island Sound. Lake Whitney is a former public drinking water supply, whose intake is located approximately 3 miles downstream of the Pine Swamp pond system. However, no active surface water drinking water intakes exist along the 15-mile surface water pathway. Sensitive environments located along the 15-mile downstream surface water pathway include a Clean Water Act (CWA)-protected water body, approximately 3,150 feet of wetland frontage, and a critical spawning area for winter flounder (*Pleuronectes americanus*). Fisheries exist throughout the surface water pathway. Analytical results of surface water samples collected from 1993 to 1994 at the inflow of the Pine Swamp pond system into Lake Whitney indicated the presence of VOCs, including 1,1,1-trichloroethane, cis-1,2-dichloroethylene, PCE, and TCE. During the same period, VOCs, including cis-1,2-dichloroethylene and TCE, were detected in one sample collected at the Lake Whitney intake structure. Analytical results of sediment samples collected in 1994 from on-site ponds and urban drainage inlet streams indicated the presence of VOCs, SVOCs, pesticides, and metals. Based on these results, a CWA-protected water body and a fishery appear to have been impacted.

No persons work at the property. There are no residences, day-care facilities, or schools located within 200 feet of the property. The nearest residence is located on Leeder Hill Drive, abutting Pine Swamp's eastern property boundary. No terrestrial sensitive environments exist in the area of the observed contamination. Approximately 15,319 people live within 1-radial mile of the property. Access to the property is restricted by a chain-link fence. Analytical results of soil samples (depth 0 to 12 inches) collected between 1986 and 1988 in the incinerator ash area indicated the presence of VOCs, SVOCs, and metals, including arsenic and lead. Based on site observations and conditions, and the proximity of nearby residential populations, no impacts to nearby residential populations are known or suspected.

There are an estimated 178,899 people, approximately 29 acres of wetlands, and habitat for 14 Federal-endangered or threatened species within 4-radial miles of the property. No laboratory qualitative air samples are known to have been collected from the property. Based on the available data, no impacts to nearby residential populations or sensitive environments from an unregulated release to air from the property are known or suspected.

The last known action at the property was the SIP completed in 1995. According to available sources, the property is an active site under the CTDEP and is under a Consent Order for remediation.

Current Status

Photos

Public Record Locations

OSRR Records and Information Center , 1st Floor, 5 Post Office Square, Suite 100 (HSC), Boston, MA 02109-3912 (617) 918-1440

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